

AMENDMENTS TO CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-45 (cancelled)

46. (Currently Amended) A timepiece, comprising:

a mechanical energy source;

an electric power generator driven by the mechanical energy source for outputting electrical energy, the electric power generator including a rotor;

a rotation controller operated with the electrical energy generated by the electric power generator;

hands driven under control of the rotation controller; and

a starter for the electric power generator, the starter comprising:

a startup member having an engaging portion capable of mechanically engaging with an engaged portion of a rotation target gear of the mechanical energy source, wherein the engaging portion is moved in response to operation of an external operating member to temporarily apply a rotating force to the rotation target gear, while the engaging portion is in engagement with the engaged portion, whereby the rotor is rotated at an increased speed upon start up of the electric power generator, wherein the rotating force temporarily applied to the rotation target gear in response to operation of the external operating member does not vary substantially regardless of the force applied to the external operating member, and is set to such a magnitude as to cause the rotor of the electric power generator to be started up at a reference speed.

47. (Currently Amended) A timepiece, comprising:

a mechanical energy source;

a transmission wheel train for transmitting mechanical energy from the mechanical energy source;

hands driven by the transmission wheel train for indicating the time of day;

an electric power generator including a rotor rotated through the transmission wheel train for outputting electrical energy;

an electricity accumulator for accumulating an electromotive force generated by the electric power generator; and

a rotation controller operated by the electricity accumulator, the rotation controller including a reference-signal output circuit for outputting a reference signal, and a comparison-and-control signal output circuit for detecting a cycle of the rotor of the electric power generator, comparing the detected cycle with the reference signal, and outputting a comparison and control signal; and

a starter for the electric power generator, wherein the starter temporarily applies a rotating force that acts on the transmission wheel train or the rotor in response to operation of an external operating member, wherein the rotating force temporarily applied to the transmission wheel train or the rotor in response to operation of the external operating member does not vary substantially regardless of the force applied to the external operating member, and is set to such a magnitude as to cause the rotor of the electric power generator to be started up at a reference speed.

48. (Previously Presented) The timepiece according to claim 46, further comprising:

an electricity accumulator, selectively connectable to the rotation controller through a mechanical switch, that is able to accumulate the electrical energy outputted from the electric power generator;

wherein the mechanical switch is turned off in response to a first operation of the external operating member to disconnect the electricity accumulator from the rotation controller, and is turned on in response to a second operation of the external operating member to supply the electrical energy from the electricity accumulator to the rotation controller.

49. (Canceled)

50. (Currently Amended) A timepiece, comprising:

an electrical energy source;

an electric power generator driven by the electrical energy source for outputting mechanical energy, the electric power generator comprising a rotor and mechanical energy transmitting means;

a rotation controller operated with electrical energy from the electrical energy source;

hands driven under control of the rotation controller; and

a starter for the electric power generator, the starter comprising a startup member having an engaging portion capable of mechanically engaging with an engaged portion of a rotation target gear of the mechanical energy transmitting means, wherein the engaging portion is moved in response to operation of an external operating member to temporarily apply a rotating force to the rotation target gear, while the engaging portion is in engagement with the engaged portion, whereby the rotor is rotated at an increased speed upon start up of the electric power generator, wherein the rotating force temporarily applied to the rotation target gear in response to operation of the external operating member does not vary substantially regardless of the force applied to the external operating member, and is set to such a magnitude as to cause the rotor of the electric power generator to be started up at a reference speed.

51-53 (Canceled)

54. (Previously Presented) A timepiece, comprising:

a mechanical energy source;

a transmission wheel train for transmitting mechanical energy from the mechanical energy source;

hands driven by the transmission wheel train for indicating the time of day;

an electric power generator including a rotor rotated through the transmission wheel train for outputting electrical energy;

an electricity accumulator for accumulating an electromotive force generated by the electric power generator; and

a rotation controller operated by the electricity accumulator, the rotation controller including a reference-signal output circuit for outputting a reference

signal, and a comparison-and-control signal output circuit for detecting a cycle of the rotor of the electric power generator, comparing the detected cycle with the reference signal, and outputting a comparison and control signal; and

a starter comprising

a startup spring having an engaging portion capable of mechanically engaging with an engaged portion of a rotation target gear of the transmission wheel train, and

a startup-spring operating member comprising a latch portion capable of engaging with the rotation target gear to stop rotation thereof and a startup-spring biasing portion for biasing the startup spring by a predetermined amount, wherein the startup-spring operating member is adapted to

bias the startup spring so as to engage the engaging portion thereof with the engaged portion of the rotation target gear and to cause the latch portion to engage with the rotation target gear, in response to a first operation of the external operating member, to temporarily apply a rotating force to the rotation target gear, while the engaging portion is in engagement with the engaged portion and the latch portion is in engagement with the rotation target gear, whereby the rotor is rotated at an increased speed upon startup of the electric power generator, and

release the startup spring from a biased state to return the startup spring to an original position in response to a second operation of the external operating member.

55. (Previously Presented) The timepiece according to claim 46, wherein, in biasing the startup spring, the engaging portion thereof is moved substantially in a tangential direction relative to a peripheral portion of the rotation target gear.

56. (Previously Presented) A timepiece, comprising:

a mechanical energy source;

a transmission wheel train for transmitting mechanical energy from the mechanical energy source;

hands driven by the transmission wheel train for indicating the time of day;

an electric power generator including a rotor rotated through the transmission wheel train for outputting electrical energy;

an electricity accumulator for accumulating an electromotive force generated by the electric power generator; and

a rotation controller operated by the electricity accumulator, the rotation controller including a reference-signal output circuit for outputting a reference signal, and a comparison-and-control signal output circuit for detecting a cycle of the rotor of the electric power generator, comparing the detected cycle with the reference signal, and outputting a comparison and control signal; and

a starter comprising

a startup spring having an engaging portion capable of mechanically engaging with a pinion of a gear of the transmission wheel train, the gear being directly coupled to the rotor, and

a startup-spring operating member comprising a latch portion capable of engaging with the pinion to stop rotation thereof and a startup-spring biasing portion for biasing the startup spring by a predetermined amount, wherein the startup-spring operating member is adapted to

bias the startup spring so as to engage the engaging portion thereof with the engaged portion of the pinion and to cause the latch portion to engage with the pinion, in response to a first operation of the external operating member, to temporarily apply a rotating force to the pinion, while the engaging portion is in engagement with the engaged portion and the latch portion is in engagement with the pinion, whereby the rotor is rotated at an increased speed upon startup of the electric power generator, and

release the startup spring from a biased state to return the startup spring to an original position in response to a second operation of the external operating member.